



## Glass floor

Stream House, Los Angeles, California, USA  
Kovac Architects

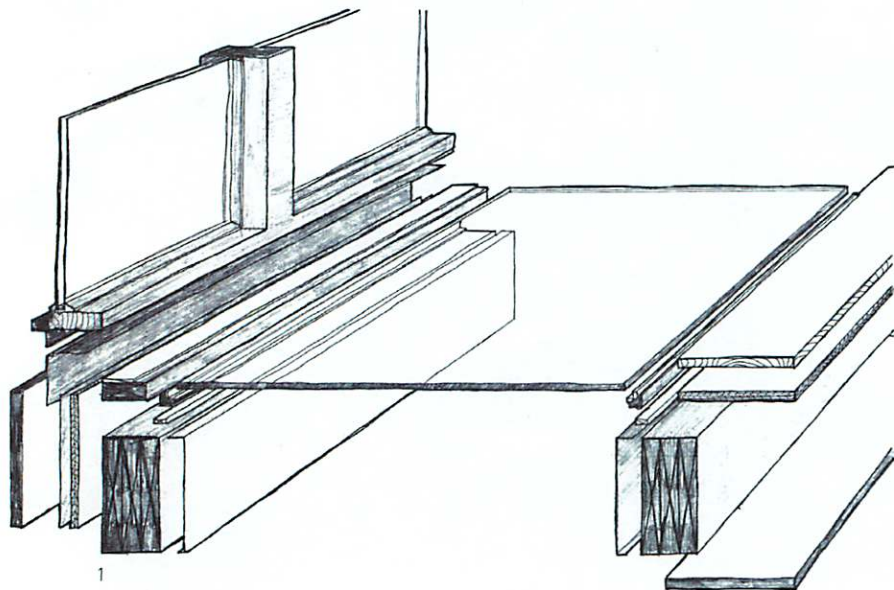
The available building envelope for this small site – rigidly shaped by strict zoning, restrictive prevailing setbacks and proximity to a protected oak tree – prescribed a narrow and vertical response in the new volume along with extensive renovation to the existing building. Due to the steepness and instability of the hillside site, the architect was required to carefully position a single pile to receive three thin diagonal steel columns, which in turn support the new wood-clad volume.

The added volume is only 12 feet wide but provides a welcome extension of the living room, an added upper-level master suite and a reading nook. Maximising the effect of limited interventions was a theme of this project, but it was also crucial for the architect to preserve the dramatic voice of

the existing building. In order to frame a view of the stream below, a large glass window was installed that wraps 3 feet under the floor of the dining room, providing a dramatic view over the valley and down to the stream below.

This glass capture detail, comprising two panes of  $\frac{3}{8}$ -inch-thick glass, is flush with the dining room floor and is an example of the simplicity in design required for this extension and renovation. By recessing a  $\frac{3}{4}$ - by  $\frac{3}{4}$ -inch stainless steel angle and using a carefully applied silicone bed, the capture detail wraps around all edges of the window. With precise engineering and using only a few selected elements, no excessive detailing was necessary to achieve this striking detail. Along with the refinement of further views downward by the 3-foot glass conversion of the existing deck, and the replacement of the wood deck railing with a cable rail system, a palpable connection to the beauty of the site is achieved where previously there had only been a disconnected proximity.

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1 Exploded axonometric

Opposite

View from stream to glass floor above

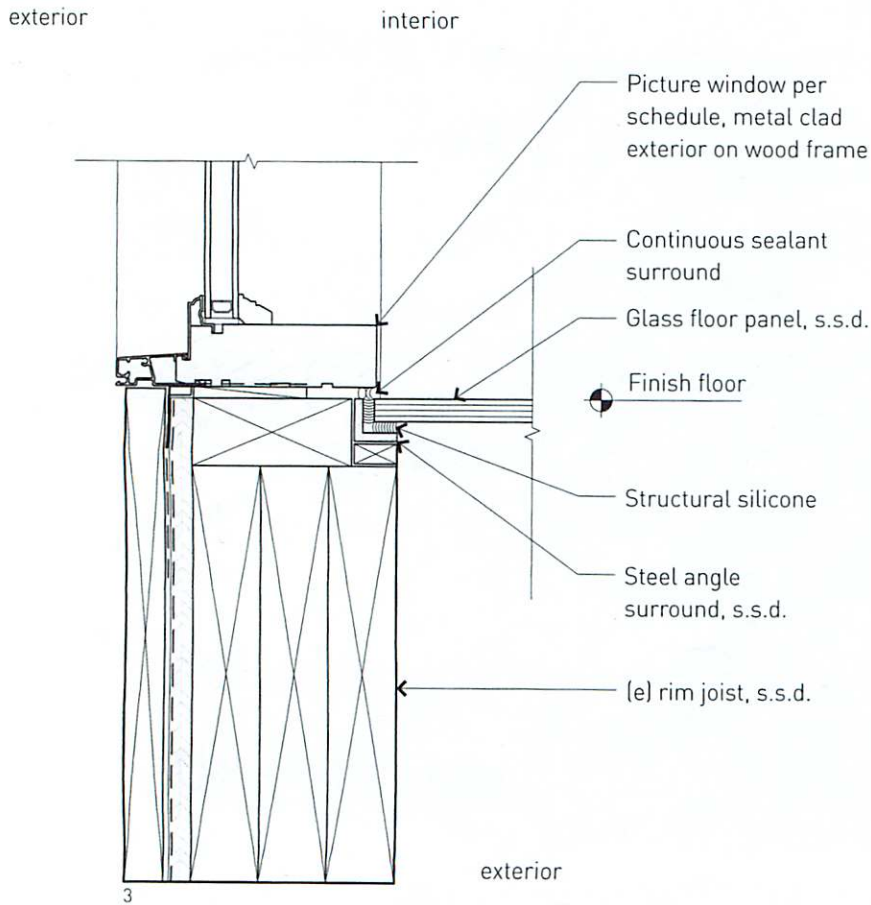
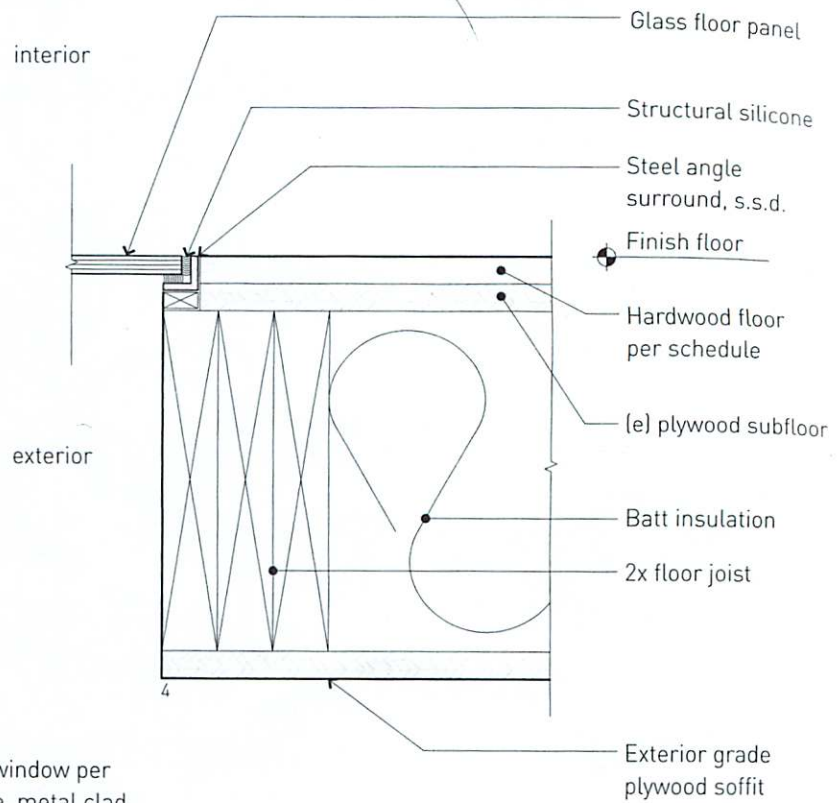


3&4 Sections through glass floor

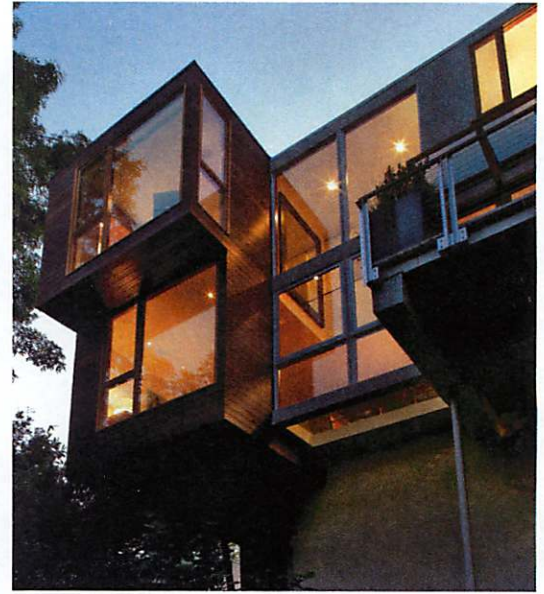
5 Glass floor detail

6 Exploded axonometric

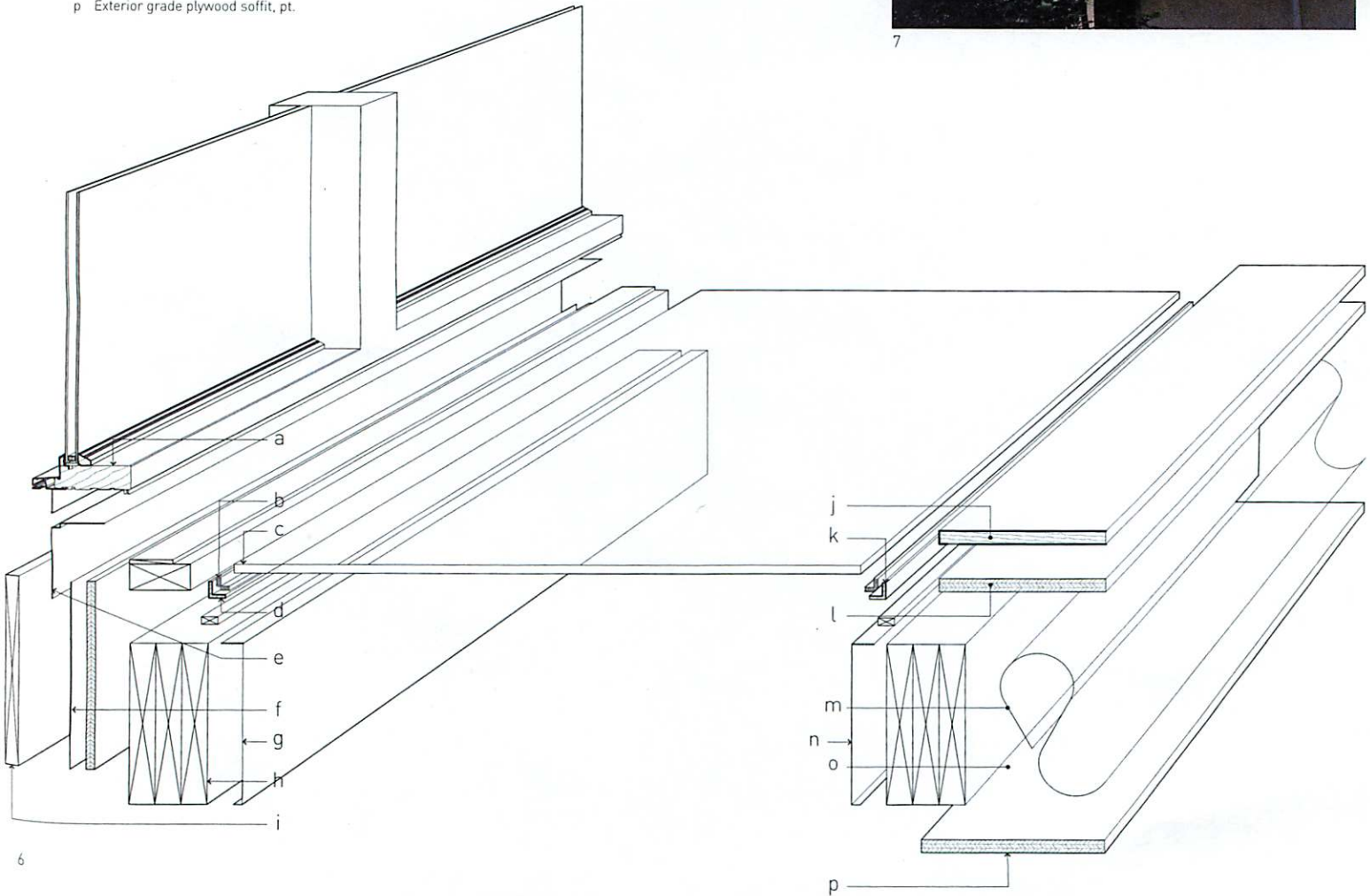
7 Exterior view at dusk



- a Picture window per schedule, metal clad exterior on wood frame
- b Continuous structural silicone surround and setting bed
- c 1/2-inch-thick laminated, tempered clear glass floor panel
- d 3/4 by 3/4 by 3/16-inch brushed stainless steel angle surround, typ.
- e Self-adhered waterproofing typ @ sill
- f Building paper
- g Painted brake metal
- h (e) rim joist, s.s.d.
- i Painted wood panel over SWAP membrane over sheathing
- j Hardwood floor per schedule
- k 3/4 by 3/4 by 3/16-inch brushed stainless steel angle surround, typ.
- l Plywood subfloor
- m Batt insulation
- n Painted brake metal
- o 2x floor joist, s.s.d.
- p Exterior grade plywood soffit, pt.



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